

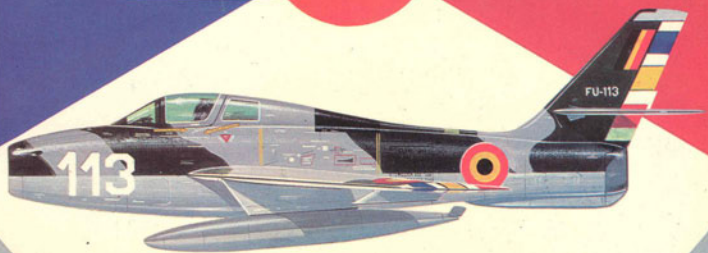
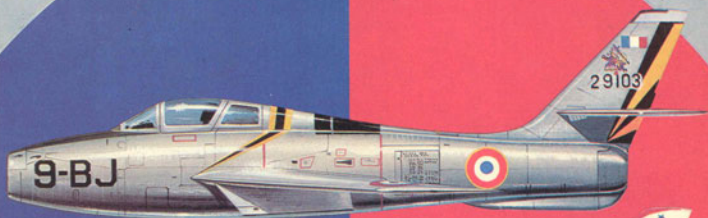
AIRCAM AVIATION SERIES

№14

REPUBLIC F/RF-84F

THUNDERSTREAK/THUNDERFLASH

IN USAF · BAF · R Nor AF · R Neth AF · Luft · French AF · TAF · CNAF & RDAF SERVICE





View from boom operator's position as an F-84F of the 160th Tactical Fighter Squadron, Illinois Air National Guard, prepares to hook up for fuel from a KC-97L of the 181st Air Refueling Squadron, Texas ANG. (Norman E. Taylor)



F-84F of the Italian Air Force, 6th Aerobrigata 'Diavoli Rossi' Aerobatic Team in 1957 markings. Ghedi.

REPUBLIC F/RF-84F THUNDERSTREAK/THUNDERFLASH

IN USAF·BAF·R Nor AF·R Neth AF·Luft·French AF·TAF·CNAF & RDAF SERVICE

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Ernest R. McDowell

ACKNOWLEDGEMENTS

This book on the Republic F/RF-84F Thunderstreak/Thunderflash is the first title in the AIRCAM AVIATION SERIES to cover a post-war aircraft. The F-84F was picked because the type has a long history of service with the United States Air Force, Nato Air Forces and Air National Guard Units but very little has been published pictorially on the aircraft to date. The Greek Air Force RF-84Fs are not represented either in colour or half-tone as no photographs of these aircraft in squadron service have been made available at the time of going to press. My thanks to all those who assisted with photographs and information, whose names are listed below in alphabetical order.

G. Apostolo, Jean Cuny, L. B. Hansen, R. W. Harrison, Capt. A. P. de Jong, Gerhard Joos, G. H. Kamphuis, D. A. Kasulka, D. W. Menard, S. P. Peltz, Jacob Stoppel, N. E. Taylor, Lt. Col. M. C. Terlinden, M. C. Windrow, Establishment Cinematographique des Armees (ECA), French Air Force, Italian Air Force, Royal Danish Air Force, Royal Netherlands Air Force, United States Air Force.



F-84F of the Italian Air Force, 6th Aerobrigata 'Diavoli Rossi' Aerobatic Team in late 1958 markings. Ghedi.

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RF-84F, 29th Tactical Reconnaissance Squadron, 363rd Tac Recon Wing, Shaw Air Force Base, South Carolina. Red nose, wing fences and checks on tail. (USAF via Norman E. Taylor)



F-84F, 55th Tactical Fighter Squadron, 20th Tactical Fighter Wing, RAF Weathersfield, May 1956. Blue trim as colour illustration. (Mason via N. E. Taylor)

ing off the assembly line in June of 1947. This model had the M-2 machine gun replaced by the M-3, which had a higher rate of fire; it carried six of them, with a capacity of 300 r.p.g. and retractable under-wing rocket launchers for rocket pods. Ejector seats became standard equipment on this model. The F-84B was soon replaced on the production line (in April of 1948) by the F-84C version, which featured the J-35-A-13C engine. Other alterations included a revised electrical system and changes in the fuel and hydraulic systems, which together added about a ton to the weight; however, the added power kept the performance envelope stable. After 191 aircraft had been completed, the D model replaced the F-84C and began flowing off the production line by November. The 154 F-84D's produced featured a redesigned and strengthened wing to fit them for a fighter-bomber rôle and enable them to carry more external stores. A hinged gun deck, a Sperry gun sight and a winterized fuel system were also added. Top speed was now close to 600 m.p.h. The F-84D made its first flight in November 1948.

Six months later on May 18th, 1949, the F-84E took to the air on its maiden flight. It seemed to be the end of the line for the design, as the increased power and other modifications brought it close to the airframe's speed limitation. The E model was powered by the J-35A-17 and had the fuselage lengthened by 13 inches.

A Sperry radar sight was fitted, and internal fuel capacity increased, with provision being made for the mounting of two 230-gallon fuel tanks under the wing tips and two more under the wings; these were jettisonable tanks. Fins were added to the wing tip tanks to permit full flight manoeuvres with the tanks attached. In lieu of the drop tanks the plane could carry up to 32 five-inch rockets, or two thousand-pound bombs and two 11.75 rockets, for the fighter-bomber close support rôle. In all 843 E models were turned out by Republic, and it was the E which carried the Republic name into jet combat when they went into action in Korea on December 7th, 1950.

The F-84E was selected as the first U.S. jet aircraft to be furnished in quantity to the air forces of the NATO nations. During an accelerated development programme one E had been flown continuously for just a shade over 23 out of 24 hours. During this phase fifteen Thunderjets had compiled a total of 750 flying hours in a single week.

The pressure generated by the Korean conflict coupled with the fact that the original design had been carried about as far as it could go led Republic to turn out an entirely new version of the Thunderjet, and construction of the YF-84F commenced in January of 1950. It was later redesignated the YF-96A, and made its initial flight on June 3rd, 1950. On August 6th it was once again redesignated as the YF-84F.

Another shot of an F-84F of the 55th Squadron at RAF Weathersfield, note change of markings. Blue trim, see colour illustration. (Gerhard Joos)





Neat formation by four F-84F's of the 55th TFS, photograph taken late 1955. (via D. W. Menard)

While about 60% of the existing tooling was used, the aircraft itself was redesigned so extensively that none of the major components were interchangeable with previous models. Power was supplied by the J-35-A-25 which generated 5,200 pounds of thrust, but it was planned to replace this engine with the more powerful Wright J-65, a licence-built version of the British Sapphire. The wings and tail were swept back 40%. An imported Sapphire was installed for test purposes, and this version took to the air on February 14th, 1951. Difficulties arose with the engine and the wing structural components and slowed up the programme.

This resulted in the appearance of the F-84G, which reverted to the original design, but employed the J-35-A-29 producing 5,600 pounds of thrust. A reinforced canopy was fitted, an auto-pilot installed and long range operations were insured by the addition of a receptacle on the left wing to permit aerial refuelling of the "flying boom" type rather than the "probe and drogue" which had been tried on the F-84E. The F-84G was the first American jet fighter equipped to deliver a tactical atomic bomb. While the G was only intended to be an interim design, it proved to be so successful that a total of 3,025 were built and a large number were supplied to the NATO Nations taking part in the Mutual Security Programme. Progress was meanwhile being made on the F-84F programme and the model was assigned a new name—the Thunderstreak. Conceived and developed simultaneously was the RF-84F Thunderflash, a reconnaissance version.

A pre-production Thunderstreak which was rolled out in March of 1952 had a solid nose with wing root air intakes, and featured the G model canopy. A pre-production Thunderflash was built in parallel as the YRF-84F, and it too had the wing root intakes which became standard on the reconnaissance version. It carried only four M-3 guns and the nose was modified and elongated to carry cameras, radar, or a variety of other secret electronic gear.

The production Thunderstreaks went back to an oval nose air intake and carried six M-3 guns. This model had a set of fuselage-mounted speed brakes, and models from the "dash 25" onwards were equipped with the all-flying tail. It was fitted to carry four drop tanks or bombs in the fighter-bomber configuration.

The Thunderflash could carry several night cameras, along with a number of magnesium flares in flash ejector cartridges which were mounted under the wings for use with these cameras. A total of 15 standard cameras fitted the RF-84F mountings, and a number of various combinations could be carried, including dicing cameras or the Tri-Metrogen camera. The RF-84F was the first reconnaissance fighter to have a camera control system and a view-finder for the pilot. An automatic computer in the camera control system analyzed such factors as speed, altitude and light, and automatically set the cameras. It was also equipped with a wire recording system for pilot comments during a visual reconnaissance mission. This obviated the necessity for the pilot to make notes or commit to memory what he saw. He could record the direction, speed and other details, which would not show up in a still photo, of any suspicious ground movements. He could also record the exact time, speed and altitude at which he had taken the pictures.

The XF-84H was the last new design in the series. Although two Thunderjets were later modified to accept the J-73-GE-7 power plant, these were not actually production models and the project never went any further. They were designated as the YF-84J.

The XF-84H was built to explore the possibilities of a turbo-prop fighter. Extensive modifications were necessary to fit the XT-40-A-1 engine, manufactured by Allison, into the airframe. A three-bladed supersonic paddle-type airscrew was fitted. The fuselage had an anti-torque fin added and a T-type tail. The Navy had expressed interest in the project, but became less enthusiastic as a result of initial tests. When the engine was run up on the ground, everyone within a large radius became nauseated by the

Same formation as above, note only one aircraft has the Wing insignia on fin and Squadron insignia on fuselage. (via D. W. Menard)



sound the propeller produced. Although this was the fastest propeller-driven aircraft ever built, the project was soon dropped.

Another interesting modification was made to a YF-84F in May of 1953. A retractable hook was attached to the fuselage just ahead of the cockpit. This hook was used to engage a trapeze which had been built into the bomb bay of a modified GRB-36. The project was known as FICON; the idea was that the B-36 could carry a reconnaissance aircraft or fighter within range of a target to be photographed or attacked with an atomic weapon, release it, and then retrieve it after the completion of the mission. Thus the jet's limited range could literally be made global by the system. It worked well enough, but in-flight fuelling considerations rendered it impractical. This model was designated as the RF-84K.

When the last F-84 rolled off the production line, it was the 7,883rd one built. Broken down, the production consisted of 4,457 Thunderjets, 2,711 Thunderstreaks and 715 Thunderflashes. The majority were built in the Republic plant, but a smaller number were built in the Kansas City plant of General Motors.

Operational use

At least twenty-eight Groups were equipped with the various models of the F-84 in the USAF at one time or another. Any exact count of these units is difficult to determine, since so many had been redesignated due to organizational changes in the Air Force itself. Some were merely changed from Fighter Groups to Fighter-Bomber Groups to Fighter-Interceptor Groups. Others were given

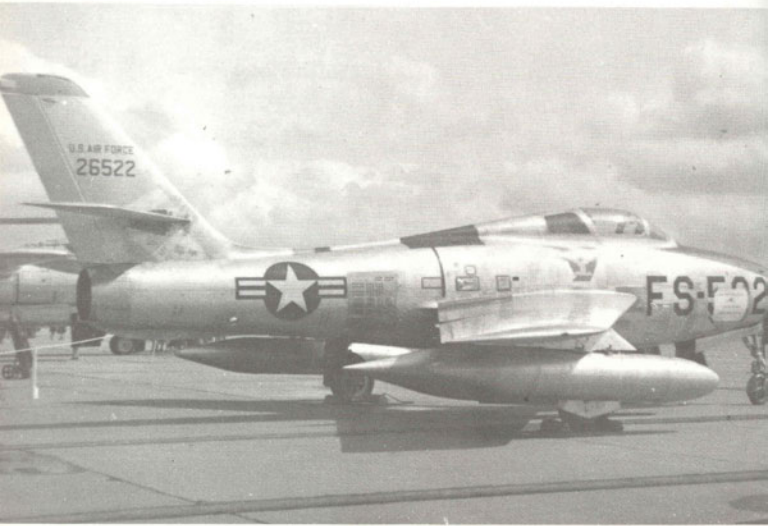
entirely new identities, such as the 365th Group which was redesignated the 132nd Fighter-Bomber Group. The question is, does this count as a single Group or as two? Some Groups were with Air Defence Command, others with Strategic Air Command, and still others with Tactical Air Command.

A partial listing shows that SAC had the 27th and 31st Groups. The TAC had two reconnaissance Groups, the 363rd and 432nd, and seven Fighter-Bomber Groups, the 58th, 312th, 353rd, 359th, 365th, 366th and 405th. On the defensive with the ADC were the 352nd and 358th Groups. One reconnaissance Group, the 67th, operated RF-84Fs. Other Groups included the 14th, 20th, 33rd, 36th, 48th, 49th, 78th, 86th, 360th, 368th, 371st, 404th, 406th and the 474th.

Later many of these aircraft were phased out of the USAF but not out of service, as they were then handed over to the Air National Guard, and continue to serve as a part of that organization right up to the present day.

Air Guard Squadrons operating the type included the 106th, 117th and 160th Reconnaissance Squadrons from Alabama, the 184th Reconnaissance Squadron from Arkansas, and the 169th and 170th Tactical Fighter Squadrons from Illinois. From Indiana came the 113th and 163rd Fighter Squadrons. Michigan was assigned the 107th and 171st Reconnaissance Squadrons. Mississippi had the 153rd Reconnaissance Squadron, Missouri the 110th Fighter Squadron, while New Jersey was the home of the 113th and 141st Tactical Fighter Squadrons. Ohio had the most F-84 units in its Air Guard; these were the 112th, 162nd, 164th and 166th Squadrons. Virginia had the last of the Thunderjet units assigned, the 149th Tactical Fighter Squadron.

F-84F, 81st Fighter-Bomber Wing; note Wing insignia on fuselage. (Walker via N. E. Taylor)





Above: Thunderstreaks of the 81st F-BW begin to peel off over the target on a simulated fighter-bomber strike. Pilots of the 81st won the Special (nuclear) Weapons Delivery phase of the 1956 USAF Gunners Meet. (Republic via N. E. Taylor)



Above: F-84F's of the 81st F-BW at Wheelus, Libya, on detachment. (D. W. Menard)



Right: F-84F, 78th Fighter-Bomber Squadron, 81st F-BW, at an Air Display at RAF Wattisham during 1958. Squadron Leader's aircraft. (D. W. Menard)

Below: Good close-up of an F-84F of the 78th F-BW showing markings and unit insignia; see colour illustration. (D. W. Menard)



In allied colours

The F-84F was chosen as the standard fighter-bomber equipment of the air forces of the North Atlantic Treaty Organization, and it was in the colours of a foreign air force that the Thunderstreak first saw combat. The French *Armée de l'Air* took delivery of the type in 1955, and the F-84F's re-equipped the 1st, 3rd, 4th, 6th and 11th *Escadres* of the French Tactical Air Command. In October of 1956, during the Suez Crisis which saw the air and ground forces of France, Israel and Great Britain attacking Egypt, 36 Thunderstreaks of France's 1st *Escadre* flew from their home base of St. Dizier to Lydda in Israel, while the 3rd *Escadre* flew from Rheims to the RAF base at Akrotiri in Cyprus. The 1st *Escadre* went into action on 29th October, in support of the Israeli ground thrust through the Sinai Desert. On 1st November direct assaults on Egyptian air bases were commenced by Cyprus-based aircraft; a force of Soviet-supplied Ilyushin Il-28 *Beagle* jet bombers was hastily moved south to Luxor, to avoid the destruction being wrought in the coastal strip, but was then shot up and destroyed on the ground by Thunderstreak pilots from Lydda. In the operations of October/November 1956 only one F-84F, with its pilot, was lost. Reportedly the French F-84F's at Lydda were re-marked for the campaign in Israeli national stars, but this is not confirmed. Like all British, French and Israeli aircraft involved in the Suez fighting, they bore yellow and black "invasion stripe" markings round the wing roots.

The next European nation to receive Thunderstreaks was Belgium, which took first deliveries in August 1955, and during 1956 that country's 2nd and 10th Fighter-Bomber Wings were re-equipped. That year also saw Holland standardise on the Thunderstreak as fighter-bomber muscle, with six squadrons (311 to 316); and Italy took delivery of the F-84F for service with three Air Brigades, Nos. 5a, 51 and 51a. The largest numbers went to Federal Germany, and the F-84F's delivered in late 1956 were the first combat airplanes to be painted with the *Luftwaffe* cross since the end of World War II. Eventually five fighter-bomber wings were to fly the type — *Jagdбомберgeschwader* 31, 32, 34, 35 and 36.

When Germany began to standardise on the F-104G Starfighter and to phase out the Thunderstreak, aircraft were passed on to two other NATO countries, Greece and Turkey; each air force operated six squadrons of F-84F's.

The United States also made available to its allies the RF-84F reconnaissance version; of the 715 built, 386 went overseas under the Mutual Security programme. Units which employed the Thunderflash included France's 33rd *Escadre*, Germany's *Aufklärungsgeschwader* 51 and 52, the Belgian 42nd *Escadrille*, the Dutch 306 Squadron, and Italy's Air Brigade 3a. In a wider distribution than the fighter-bomber model, the RF-84F also served with the Royal Danish Air Force's 724 Squadron and the Royal Norwegian Air Force's 717 Squadron. Greece, Turkey and Formosa also operated one squadron each.

Serial Number Range	Quantity	Model
49-2430	1	YF-84F-RE
51-1344/1345	2	YF-84F-RE
51-1346/1355	10	F-84F-1-RE
51-1356/1380	25	F-84F-5-RE
51-1381/1430	50	F-84F-10-RE
51-1431/1510	80	F-84F-15-RE
51-1511/1620	110	F-84F-20-RE
51-1621/1760	140	F-84F-25-RE
51-1761/1827	67	F-84F-30-RE
52-6355/6422	68	F-84F-30-RE
52-6423/6522	100	F-84F-35-RE
51-17061/17088	28	F-84F-35-RE
52-7018/7049	32	F-84F-35-RE
52-6523/6642	120	F-84F-40-RE
52-7050/7089	40	F-84F-40-RE
52-6643/6812	170	F-84F-45-RE
52-7090/7114	25	F-84F-45-RE
52-7115/7126	12	F-84F-46-RE
52-6813/6907	95	F-84F-50-RE
52-7127/7191	65	F-84F-51-RE
52-6908/7007	100	F-84F-55-RE
52-7008/7017	10	F-84F-56-RE
52-7192/7228	37	F-84F-56-RE
52-10510/10538	29	F-84F-56-RE
53-6532/6715	184	F-84F-61-RE
53-6716/6835	120	F-84F-66-RE
53-6836/6955	120	F-84F-71-RE
53-6956/7075	120	F-84F-76-RE
53-7076/7230	155	F-84F-81-RE
51-9311/9320	10	F-84F-1-GK
51-9321/9335	15	F-84F-5-GK
51-9336/9356	21	F-84F-10-GK

F-84F, 4510th Combat Crew Training Wing, Luke Air Force Base, Arizona, in standard TAC markings, May 1962. (Norman E. Taylor)



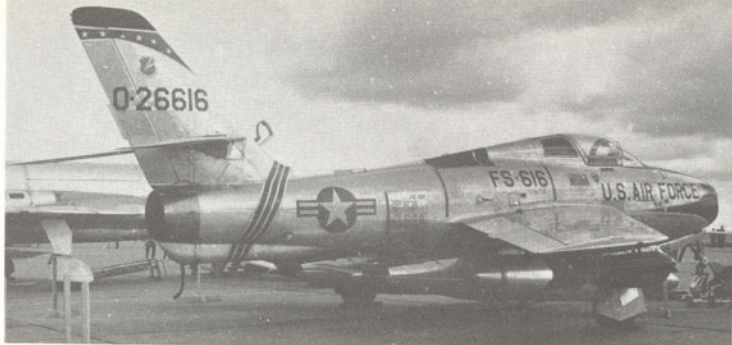


Line-up of 12th and 15th Tactical Fighter Wings at MacDill Air Force Base, Florida. (USAF via N. E. Taylor)

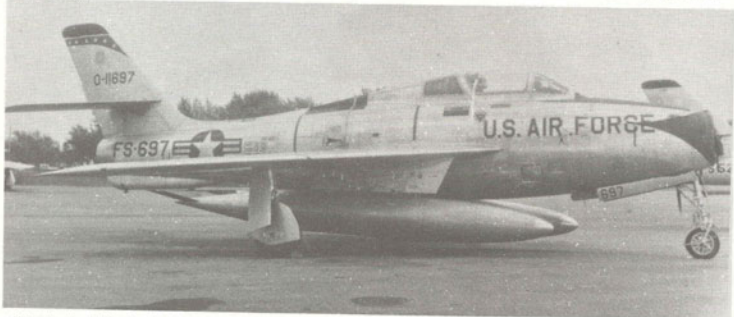
Serial Number Range	Quantity	Model	Serial Number Range	Quantity	Model
51-9357/9409	53	F-84F-25-GK	51-17003/17015	13	RF-84F-25-RE
51-9410/9454	45	F-84F-30-GK	52-7287/7295	9	RF-84F-25-RE
51-9455/9503	49	F-84F-35-GK	52-7308/7218	11	RF-84F-25-RE
51-9504/9547	44	F-84F-40-GK	51-17037/17042	6	RF-84F-25-RE
52-8767/8834	68	F-84F-41-GK	52-7340/7451	12	RF-84F-25-RE
52-8835/8982	148	F-84F-46-GK	51-1832	1	RF-84F-25-RE
52-8983/9128	146	F-84F-51-GK	52-7355/7377	23	RF-84F-25-RE
51-1828	1	YRF-84F-RE	52-7279/7286	8	RF-84F-26-RE
51-1829/1831	3	RF-84F-1-RE	52-7296/7307	12	RF-84F-26-RE
51-1833/1838	6	RF-84F-1-RE	51-17016/17036	21	RF-84F-26-RE
51-1839/1873	35	RF-84F-5-RE	52-7319/7339	21	RF-84F-26-RE
51-1874/1938	65	RF-84F-10-RE	51-17043/17058	16	RF-84F-26-RE
51-1939/1948	10	RF-84F-15-RE	52-7352/7354	3	RF-84F-26-RE
51-1950/1956	7	RF-84F-15-RE	52-7378/7385	8	RF-84F-30-RE
51-11251/11252	2	RF-84F-15-RE	52-7406/7432	27	RF-84F-30-RE
51-11255/11256	2	RF-84F-15-RE	52-7386/7405	20	RF-84F-31-RE
51-11258/11294	37	RF-84F-15-RE	52-7433/7472	40	RF-84F-31-RE
51-1949	1	RF-84F-16-RE	52-7473	1	RF-84F-35-RE
51-1957/1958	2	RF-84F-16-RE	53-7521/7532	12	RF-84F-35-RE
51-11250	1	RF-84F-16-RE	52-7474/7475	2	RF-84F-36-RE
51-11253/11254	2	RF-84F-16-RE	52-8717/8766	50	RF-84F-36-RE
51-11257	1	RF-84F-16-RE	53-7533/7558	26	RF-84F-40-RE
51-11295/11296	2	RF-84F-20-RE	53-7591/7616	26	RF-84F-40-RE
52-7234/7235	2	RF-84F-20-RE	53-7584/7590	7	RF-84F-41-RE
52-7244/7278	35	RF-84F-20-RE	53-7559	1	RF-84F-41-RE
51-11297	1	RF-84F-21-RE	53-7634/7640	7	RF-84F-45-RE
51-16996/17002	7	RF-84F-21-RE	53-7560/7583	24	RF-84F-46-RE
52-7229/7233	5	RF-84F-21-RE	53-7617/7633	17	RF-84F-46-RE
52-7236/7243	8	RF-84F-21-RE	53-7641/7697	57	RF-84F-46-RE

F-84F, 169th Tactical Fighter Squadron, Illinois Air National Guard. Aircraft in USAF TAC markings prior to change over to ANG markings. Peoria, 2nd November 1963. (P. Stephens via N. E. Taylor)



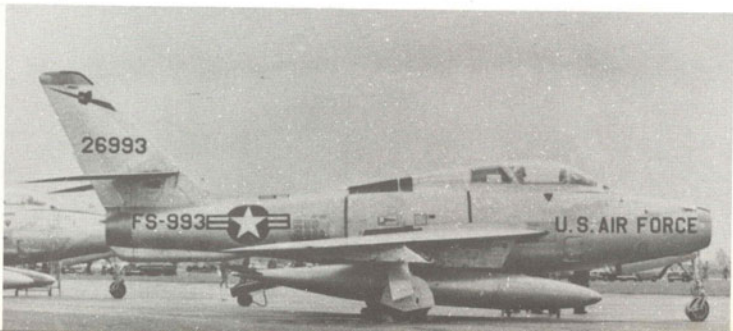


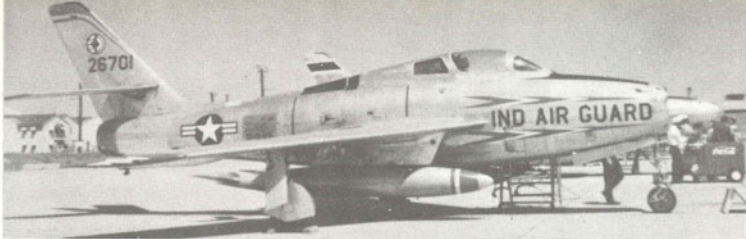
Above: Thunderstreak of the 110th Tactical Fighter Squadron, Missouri ANG, activated during the Berlin crisis. Toul, France, May 1963. (Capt. Humbolt via N. E. Taylor)



Above: Another F-84F of the 110th TFS/Missouri ANG transferred to the 169th TFS, Illinois ANG, Peoria, 25th August 1962. (P. Stevens via N. E. Taylor)

Below: F-84F, 112th TFS, Ohio ANG, activated during the Berlin crisis and assigned to the 366th Tactical Fighter Wing. Photographed at RAF Weathersfield, May 1962.





Above: F-84F, 122nd Fighter-Bomber Group, Indiana Air National Guard, see colour illustration. (D. A. Kasulka)

Below: F-84F, 122nd F-BG, Indiana ANG. Yellow and red trim. (D. W. Menard)



Below: F-84F, 106th TFS, Alabama ANG. Yellow and red trim. (D. W. Menard)



Below: F-84F, 110th TFS, Missouri ANG. 'Miss Missouri'. (D. W. Menard)



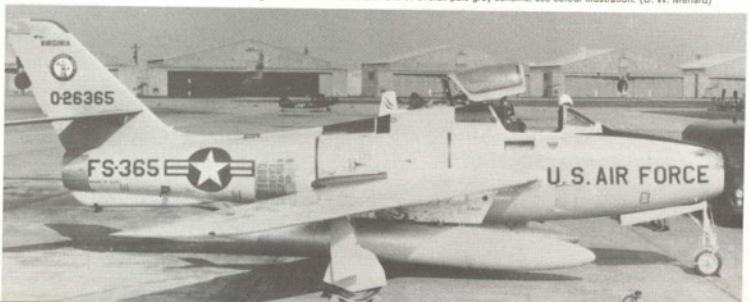


Left: F-84F, 131st TFS, Mass ANG. Overall grey scheme, red, white, red bands on long-range tanks, June 1965. (R. W. Harrison)



Above, both pictures: F-84F's of the Virginia ANG. Natural metal finish with yellow trim. (D. W. Menard)

Below: Virginia Air National Guard F-84F in overall pale grey scheme, see colour illustration. (D. W. Menard)



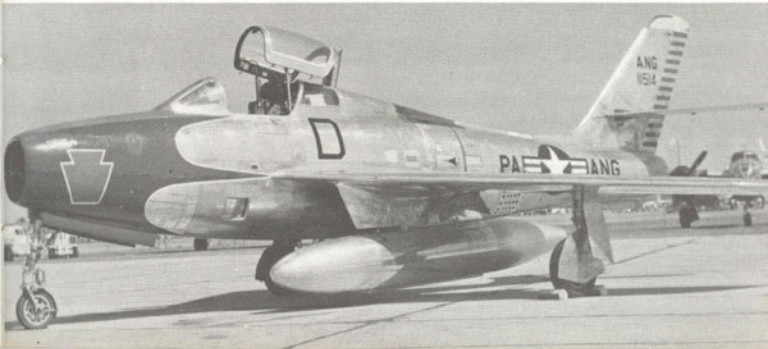


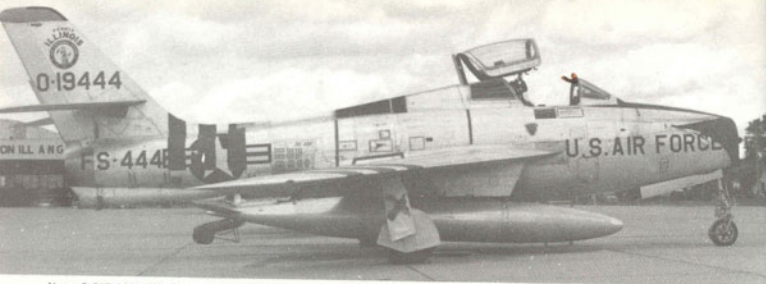
Above: Close-up shot of FS-365 in overall pale grey scheme, note natural metal panels around gun-ports. (D. W. Menard)



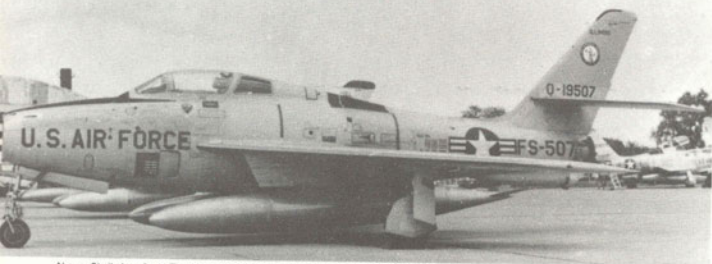
Above: F-84F of the Georgia Air National Guard, yellow and black trim on fin and rudder. (D. W. Menard)

Below: Thunderstreak of the Pennsylvania Air National Guard. Red rudder stripes and nose trim, bright red Keystone outlined white, black D. (D. W. Menard)





Above: F-84F, 169th TFS, Illinois ANG, in overall grey scheme with dark green exercise stripes on fuselage and wings. (D. W. Menard)



Above: Similarly painted Thunderstreak as above, also of the 169th TFS. (D. W. Menard)

Below: Interesting detail shot of the aft end of a 169th TFS aircraft in natural metal finish. (D. W. Menard)





Above: Peoria based F-84F of the 169th TFS. Blue, white, red stripes on nose, red band on fin and rudder.

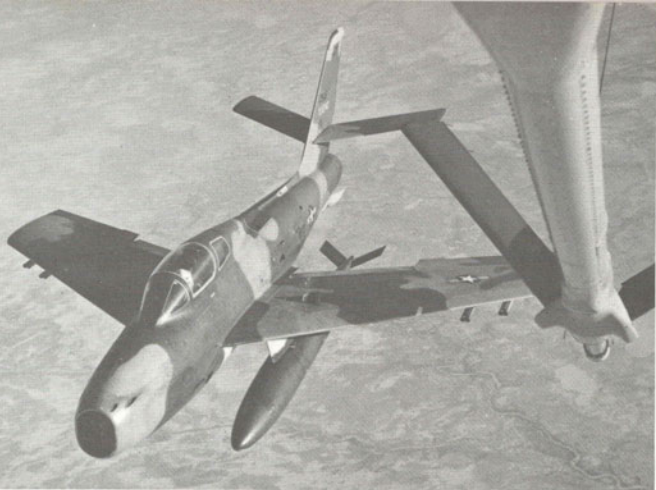


Above: 169th TFS F-84F with somewhat different markings and yellow trim, see colour illustration.



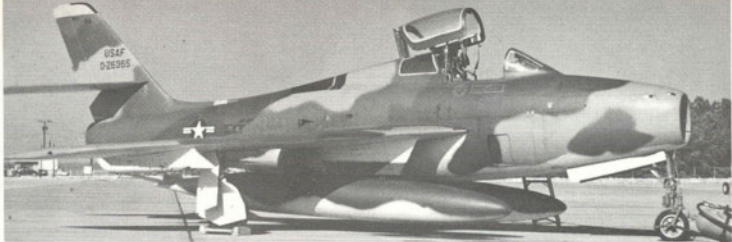
Above & below: A pair of F-84F's of the 169th TFS in standard natural metal scheme, note squadron insignia under cockpit. (Photos D. W. Menard)





Above and below: F-84F of the 162nd Tactical Fighter Squadron, Ohio Air National Guard, approaching refuelling boom of a KC-97L, 108th Air Refuelling Squadron, Illinois ANG, over Alaska during Exercise Punchcard IV, November 1968. Note in the above photograph that the drag chute doors are open, chute lost. (Norman E. Taylor)





Above, both pictures: A pair of F-84F's in the two-tone green and sand camouflage scheme, top shot shows a Virginia ANG aircraft, the lower an aircraft of the 169th TFS Illinois ANG.

Below, both pictures: RF-84F's in camouflage scheme as above, O-37538 and O-28741 both of the Michigan Air National Guard, see colour illustration. (David W. Menard)



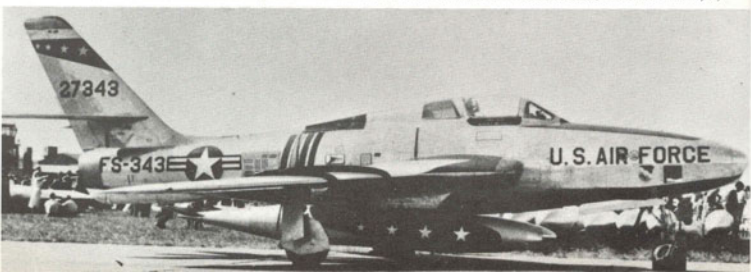


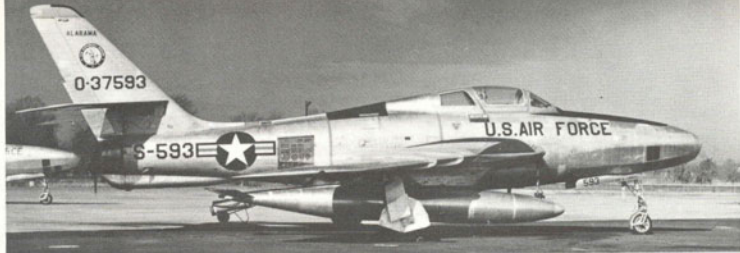
Above: Three RF-84F's of the 45th Tactical Reconnaissance Squadron, Misawa Air Base, Japan. See colour illustration; note variation in presentation of national insignia and USAF on the upper wing surface of the furthest aircraft. (via D. W. Menard)



Above: RF-84K, 91st Strategic Reconnaissance Wing, note drooping tail-plane. (Roger Besecker via N. E. Taylor)

Below: RF-84F, 66th Tactical Reconnaissance Wing, blue trim with white stars and blue, red, yellow, green fuselage stripes. (R. Walker via N. E. Taylor)





Above: Thunderflash of the 160th Tactical Recon Squadron, Alabama ANG, in standard natural metal finish. (D. W. Menard)



Above: 160th TRS Thunderflash in later markings with black and yellow trim. (D. W. Menard)



Above: RF-84F of the 174th Tactical Recon Squadron, Iowa ANG, yellow and black trim, wing fences yellow, 1962. (D. A. Kasulka)

Below: Thunderflash of the Arkansas ANG with yellow nose and tail bands lined in black, yellow and black long-range tanks and black wing fences. (D. W. Menard)





Above: Formation of F-84F's from No. 10 Wing, Belgian Air Force. Z6- No.23; RA- No.27; BS- No.31 Squadron, based at Kleine-Broghel.

Below: Three aircraft from No. 2 Wing, Belgian Air Force, at Florennes.



Below: Close-up of Z6-A FU-117, No. 23 Squadron, Belgian Air Force; red and white trim.

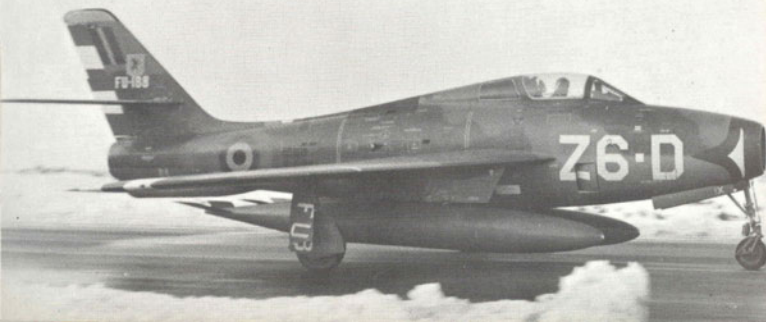




Above and below: Port and starboard views of F8U-19, No. 1 Squadron, No. 2 Fighter-Bomber Wing, Belgian Air Force, Florennes. Note the wing insignia appears on the starboard side and the squadron on the port. Wing insignia is a black and white diamond.



Below: FU-188 taxiing past snow banks alongside the runway; No. 23 Squadron, No. 10 Wing, Belgian Air Force; note wing insignia on fin.

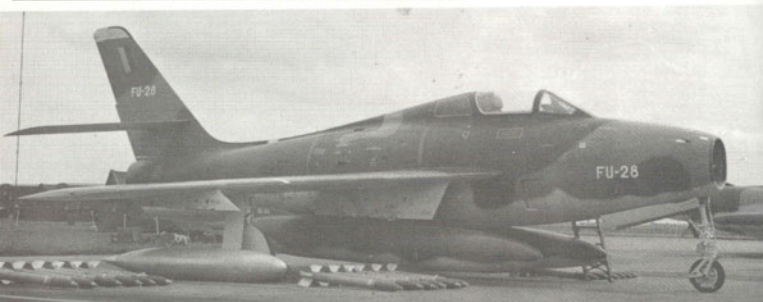




Above: F-84F flown by Major Marette, official demonstrator of the Thunderstreak at BAF and other meets. No. 2 Wing, Florennes. See colour illustration.



Left: Low-level pass by Thunderstreak of No. 2 Squadron, No. 2 Wing, probably flown by Major Marette. (via G. H. Kamphuis)



Above: Thunderstreak of No. 2 Wing and (below) Thunderflash of No. 42 TRS in latest BAF two-tone green and sand upper surfaces, with pale grey under surfaces, very similar to the present USAF scheme. (S. P. Peltz)





Above: An RF-84F Thunderflash of No. 42 Tactical Reconnaissance Squadron banking over a North Sea island. Serial FR-27.
Below: FR-12 in standard scheme, green and grey upper surfaces, blue-grey under surfaces. No. 42 TRS. BAF.



Below: H8-O FR-14 of No. 42 TRS, Belgian Air Force.



Above: Lt.-Col. M. C. Terlinden, OC No. 42 Tactical Reconnaissance Squadron, Belgian Air Force, standing in front of FR-5 H8-P, scheme as for FR-12.



Below: H8-J FR-9, No. 42 TRS, in early natural metal finish, note unit insignia on nose, also shown on H8-P, and red, black, red area from intake to trailing edge.



Right: Thunderstreaks in early R. Neth. A. F. scheme, red nose and rudder stripes, national insignia in four wing positions dating the photograph as pre-8th June 1959 when the change was made from four to two wing roundels. (via G. H. Kamphuis)



Below: Neat formation of R. Neth. A. F. Thunderstreaks in markings post 8th June 1959. (Royal Netherlands Air Force)



Below: Attractive view of F-84F's of No. 318 Tactical Fighter Squadron, R. Neth. A.F. Note squadron insignia on fin of P-266. (R. Neth.A.F.)



1
F-84F Thunderstreak, 81st Tactical Fighter Wing, 78th Tactical Fighter Squadron, RAF Bentwaters, UK. May 1958.



2
F-84F Thunderstreak, 20th Tactical Fighter Wing, 55th Tactical Fighter Squadron, Weathersfield, UK. 1956.



3
RF-84F Thunderflash, 45th Tactical Reconnaissance Squadron, Misawa Air Base, Japan.



4
F-84F Thunderstreak, 169th Tactical Fighter Squadron, Peoria, Illinois, USA. In overall pale grey scheme.



5
F-84F Thunderstreak, Pennsylvania Air National Guard.



1
F-84F Thunderstreak, 169th Tactical Fighter Squadron, Illinois Air
National Guard, Peoria, Illinois, USA.



2
RF-84F Thunderflash, Alabama Air National Guard.



3
RF-84F Thunderflash, Alabama Air National Guard.



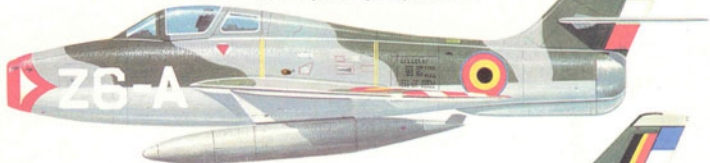
4
F-84F Thunderstreak, Indiana Air National Guard.



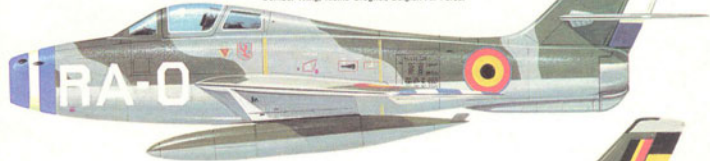
5
RF-84F Thunderflash, Michigan Air National Guard.



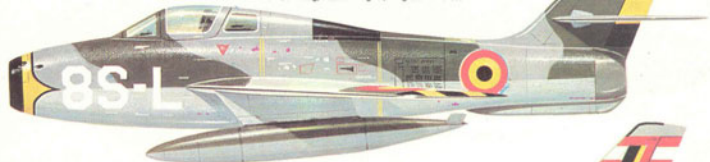
1
F-84F Thunderstreak, No. 23 Fighter-Bomber Squadron, No. 10 Fighter-Bomber Wing, Kleine-Broghele, Belgian Air Force.



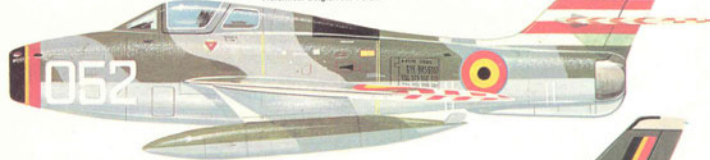
2
F-84F Thunderstreak, No. 27 Fighter-Bomber Squadron, No. 10 Fighter-Bomber Wing, Kleine-Broghele, Belgian Air Force.



3
F-84F Thunderstreak, No. 31 Fighter-Bomber Squadron, No. 10 Fighter-Bomber Wing, Kleine-Broghele, Belgian Air Force.



4
F-84F Thunderstreak, flown by Major Marett, official demonstrator of the F-84F at BAF and other meetings. No. 2 Fighter-Bomber Wing, Florennes, Belgian Air Force.



5
F-84F Thunderstreak, No. 3 Fighter-Bomber Squadron, No. 2 Fighter-Bomber Wing, Florennes, Belgian Air Force.

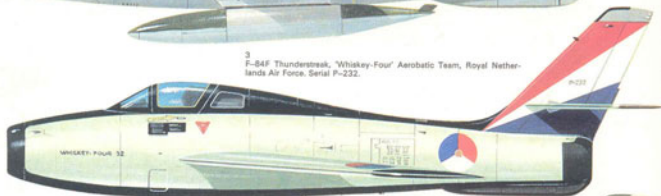




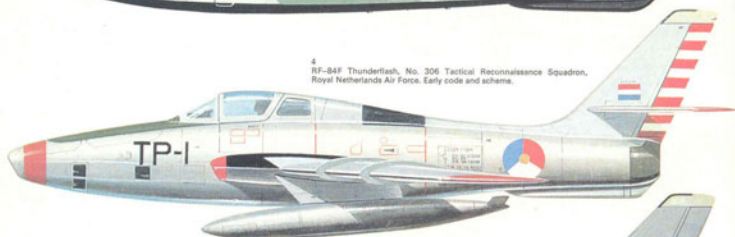
1 RF-84F Thunderflash, No. 42 Tactical Reconnaissance Squadron, Bierset, Belgian Air Force.



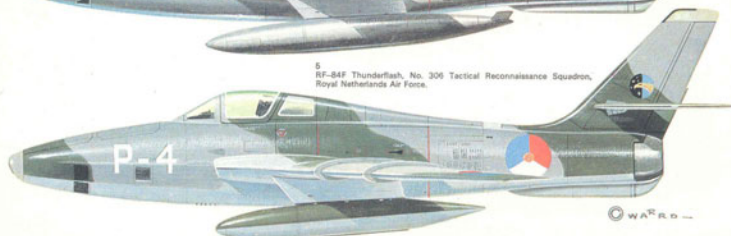
2 RF-84F Thunderflash, No. 42 Tactical Reconnaissance Squadron, Bierset, Belgian Air Force.



3 F-84F Thunderstreak, "Whiskey-Four" Aerobatic Team, Royal Netherlands Air Force. Serial P-232.



4 RF-84F Thunderflash, No. 306 Tactical Reconnaissance Squadron, Royal Netherlands Air Force. Early code and scheme.



5 RF-84F Thunderflash, No. 306 Tactical Reconnaissance Squadron, Royal Netherlands Air Force.

1
F-84F Thunderstreak, 1st Escadre, 1/1 'Corse' Escadron, Saint Dizier,
French Air Force.



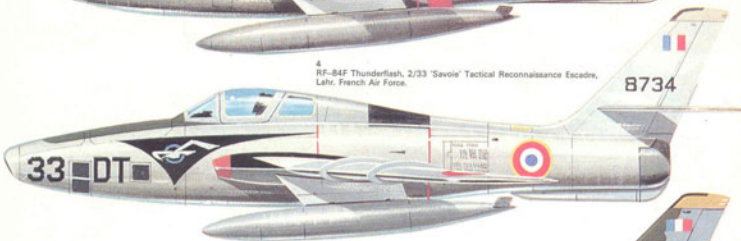
2
F-84F Thunderstreak, 1st Escadre, 2/4 'Lafayette' Escadron, Brem-
garten, 1959. French Air Force.



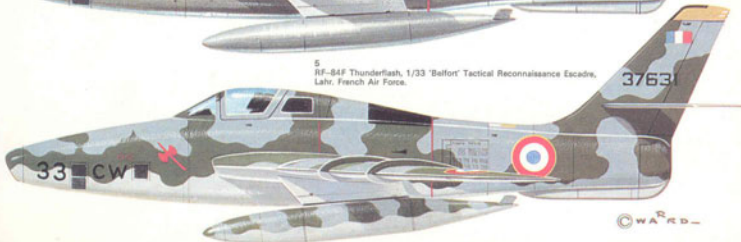
3
F-84F Thunderstreak, 1st Escadre, 2/3 'Champagne' Escadron, Reims,
French Air Force.



4
RF-84F Thunderflash, 2/33 'Savoie' Tactical Reconnaissance Escadre,
Lahr, French Air Force.



5
RF-84F Thunderflash, 1/33 'Belfort' Tactical Reconnaissance Escadre,
Lahr, French Air Force.





1
F-84F Thunderstreak, Jagdbombergeschwader 32, Luftwaffe.



2
F-84F Thunderstreak, Jagdbombergeschwader 34, Luftwaffe.



3
RF-84F Thunderflash, Aufklärung 51, Luftwaffe. In early scheme and unit insignia.



4
RF-84F Thunderflash, Aufklärung 51, Luftwaffe.



5
RF-84F Thunderflash, Aufklärung 52, Luftwaffe.

1
F-86F Thunderstreak, 5th Aerobrigata, Italian Air Force.



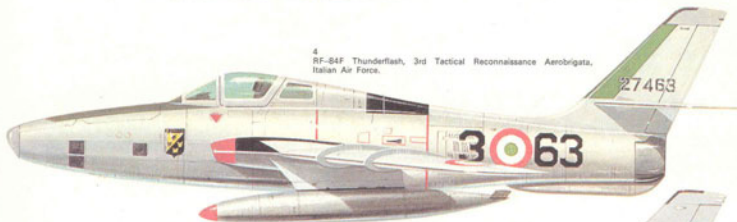
2
F-84F Thunderstreak, 5th Aerobrigata Olympic Games Aerobatic Team, 1962, Italian Air Force.



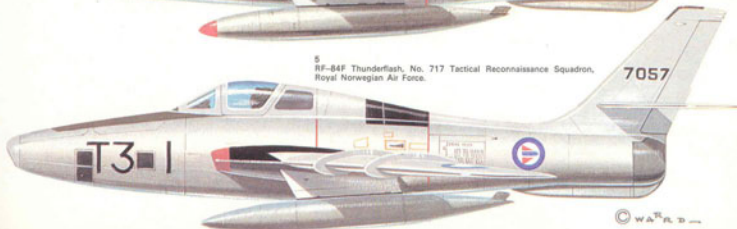
3
F-84F Thunderstreak, 6th Aerobrigata "Diavoli Rossi" Aerobatic Team, 1957-58, Italian Air Force.



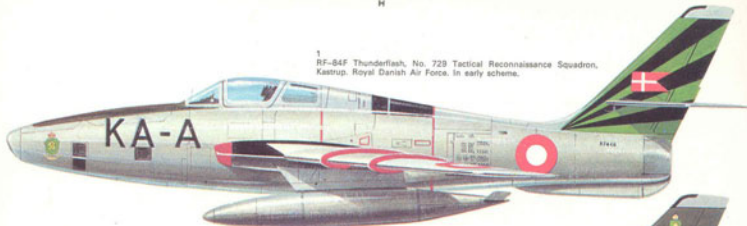
4
RF-84F Thunderflash, 3rd Tactical Reconnaissance Aerobrigata, Italian Air Force.



5
RF-84F Thunderflash, No. 717 Tactical Reconnaissance Squadron, Royal Norwegian Air Force.



1
RF-84F Thunderflash, No. 729 Tactical Reconnaissance Squadron,
Kastrup, Royal Danish Air Force. In early scheme.



2
RF-84F Thunderflash, No. 729 Tactical Reconnaissance Squadron,
Kastrup, Royal Danish Air Force.



3
F-84F Thunderstreak, Turkish Air Force.



4
RF-84F Thunderflash, Turkish Air Force.

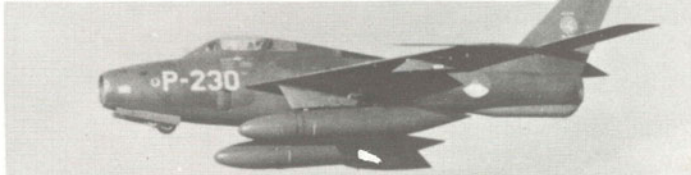


5
RF-84F Thunderflash, Chinese Nationalist Air Force.





Above: F-84F of No. 311 Tactical Fighter Squadron, R. Neth. A. F. based at Volkel. The PP- code was used from 1956 to 1959. (J. Cuny)



F-84F of No. 314 TFS, R. Neth. A. F., coming in to land, note unit insignia on fin. (Colour details of R. Neth. A. F. insignia will be found on UI/No.2 in Aircam No. 2.) Note insignia of AG51 on nose ahead of P-230. (Gerhard Joos)



F-84F of No. 315 TFS in latest camouflage scheme. (S. P. Peltz)



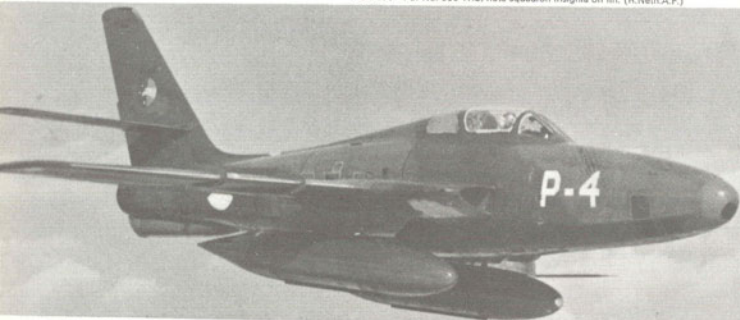
Above and below: Aircraft of No. 315 Squadron taking off from Eindhoven. Note natural metal and camouflaged schemes. (Gerhard Joos)



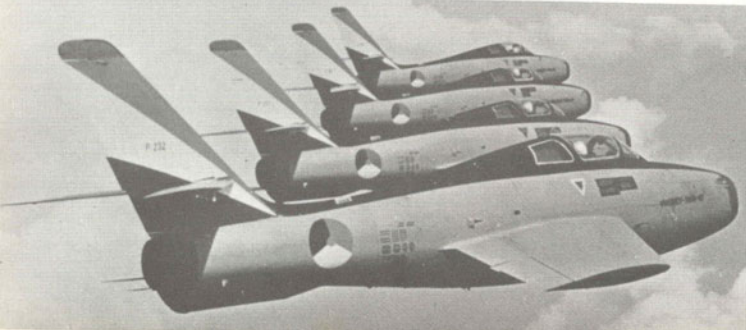


Above: Formation of RF-84F's of No. 306 Tactical Reconnaissance Squadron, R. Neth. A.F. The squadron code change from TP- to P- took place in the spring of 1959. (R.Neth.A.F.)

Below: P-4 of No. 306 TRS, note squadron insignia on fin. (R.Neth.A.F.)



Below: Neat formation of 'Whiskey Four' the Royal Netherlands Air Force aerobatic team. See colour illustration. (via G. H. Kamphuis)

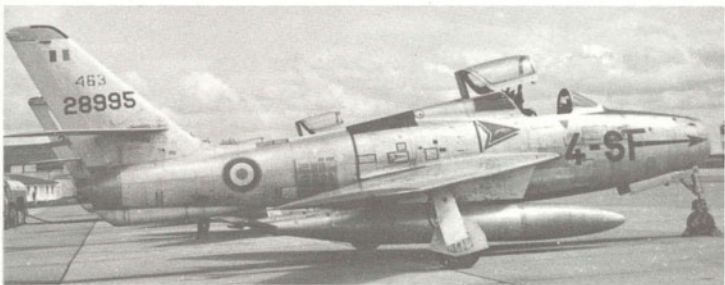




Above: F-84F, 1st Escadre, 2/4 'Lafayette' Escadron, French Air Force, Bremgarten, 1959. (S. P. Peltz)

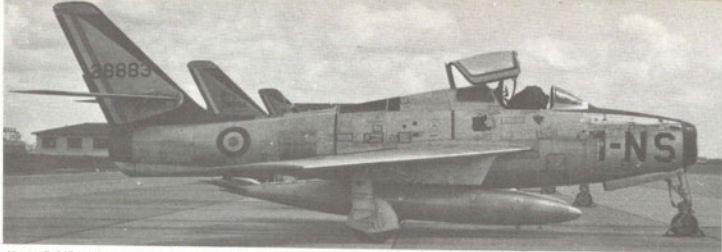


Below: Starboard side presentation of 2/4 'Lafayette' Escadron aircraft, the insignia is the old Spa 167, 2 Esc. (Jean Cuny)



Above and below: Port and starboard views of aircraft of 1/4 'Dauphine' Escadron based at Bremgarten 1957. Insignias, port side old Spa 37, starboard Spa 81. Natural metal scheme, red arrow head. (S. P. Peltz)





Above: F-84F, starboard presentation of 1/1 'Corse' Escadron aircraft, insignia Spa 69, 2nd Escadre; see colour illustration. Based at Saint-Dizier, now flying F-100's (S. P. Peltz)



Above and left: Port and starboard presentation of F-84F's of 2/9 'Auvergne' Escadron; insignia, port Spa 85, starboard 'Moriatur'. Unit based at Metz, 1961. (Photos D. W. Menard and Jean Cuny)

Below: Maintenance work being carried out on F-84F's of 3/3 'Ardennes' Escadron at Lod, Israel, during the Suez operations. Fuselage and wing stripes were yellow and black. (ECA)





Left: Two F-84F's of the 3/3 'Ardenne' during the Suez operations. Note that one has wing stripes, the other fuselage stripes only; note also variation in presentation of the boar's-head unit insignia on port and stbd. sides. (ECA)

Below, left: RF-84F Thunderflash of 1/33 'Belfort' in green and grey camouflage, the red battle axe unit insignia is just visible above the first 3 of the code. (Jean Cuny)

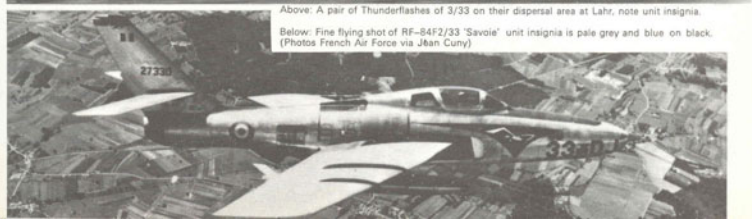


Below: 33TC of 3/33 'Moselle', unit insignia is black arrow head with red paper horse.



Above: A pair of Thunderflashes of 3/33 on their dispersal area at Lahr, note unit insignia.

Below: Fine flying shot of RF-84F/33 'Savoie' unit insignia is pale grey and blue on black. (Photos French Air Force via Jean Cuny)



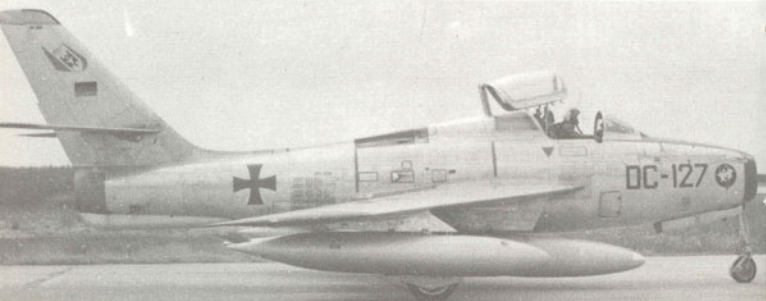


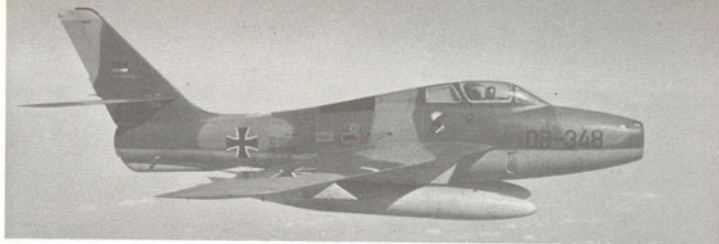
Above: F-84F of Jagdbombergeschwader 32, Luftwaffe, flying in close formation with a Fiat G-91T/3; white drop tanks: see colour illustration. (Gerhard Joos)



Above: Another fine flying shot of an F-84F this time of Jagdbombergeschwader 34, Luftwaffe, code DD-313; see colour illustration. (Gerhard Joos)

Below: Thunderstreak of Jabo 33, Luftwaffe, in early natural metal finish taxiing along perimeter track. Pale blue drop tanks, red nose. (D. W. Menard)





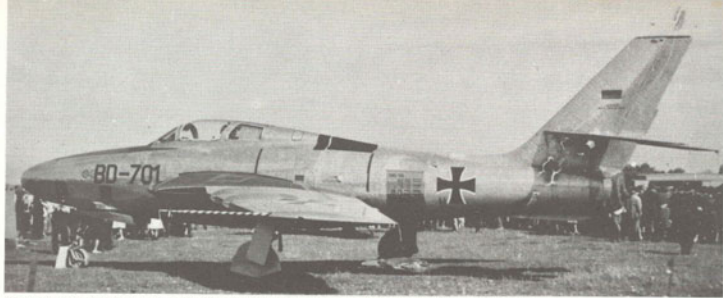
Above: F-84F, Jabo 32, Luftwaffe, at altitude, note unit insignia under cockpit, code DB-348. (Gerhard Joos)



Above: Camouflaged Thunderstreak of Jabo 33, Luftwaffe, on its dispersal area, code DC-258, unit insignia subsequently painted on fin. (D. W. Menard)

Below: Luftwaffe F-84F of Jabo 36. Unit insignia, white horse on red square, red nose, otherwise standard camouflage, Code DF-368 (S. P. Peltz)





Above: RF-84F of Aufklärung 51, Luftwaffe, prior to code change: standard natural metal finish. (S. P. Peltz)



Above: Red-tailed Thunderflash of Aufklärung 51, Luftwaffe, with early unit insignia, a red devil holding a camera on a pale blue ground. (D. W. Menard)



Above: Same aircraft with later unit insignia: see colour illustrations (S. P. Peltz)

Below: Camouflaged Thunderflash of Aufklärung 52 on its dispersal area; see colour illustration. (S. P. Peltz)





Above: An F-84F of the 5th Aerobrigata, Italian Air Force. (Italian Air Force)



Above: F-84F of the 50th Stormo, Italian Air Force, based at Piacenza S. Damiano Airbase. Red wing and tail plane tips, red, black and gold insignia, blue fin markings. (G. Apostolo)

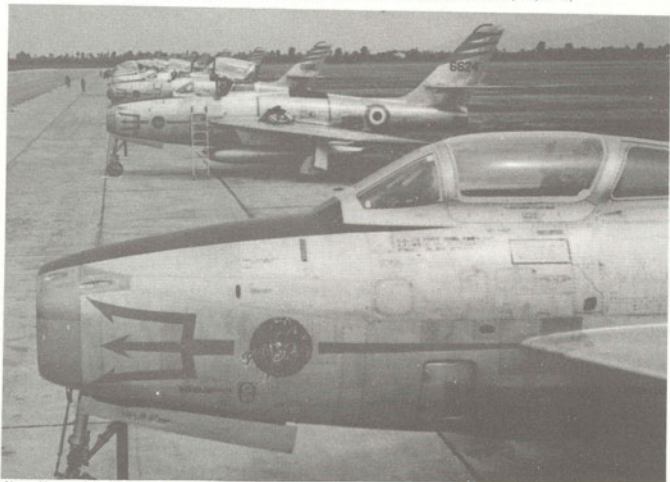


Above and below: Port and starboard markings of F-84F's of the 5th Aerobrigata Olympic Games Aerobatic Team, 'Getti Tonanti', Italian Air Force, starboard side; 5th Aerobrigata insignia port side. (Photos, top D. W. Menard, bottom G. Apostolo)





Above: F-84F of the Italian Air Force, 6th Aerobrigata 'Diavoli Rossi' Aerobatic Team, 1957, based at Ghedi. (G. Apostolo)



Above: Line-up of the 'Diavoli Rossi' Aerobatic Team, 6th Aerobrigata, in 1957 markings. (G. Apostolo)

Below: Thunderflash of the 3rd Aerobrigata. Italian Air Force, based at Villafranca. Wing, tail-plane tips and fin leading edge red, otherwise as colour illustration. (D. W. Menard)



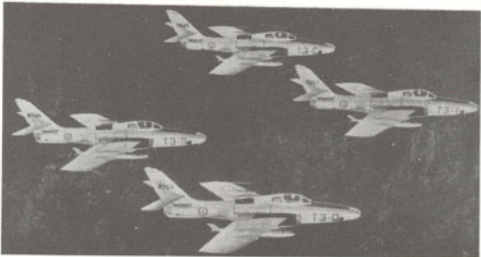


RF-84F Thunderflashes of the 3rd Aerobrigata, Italian Air Force. Top two photos of 3-49 and 3-3 in red trim (D. W. Menard). Centre also with red trim (G. Apostolo). Bottom, with green tips to drop-tanks, wing, tail-plane and fin leading edges, unit insignia in yellow and black. Based at Villafranca. (Italian Air Force)





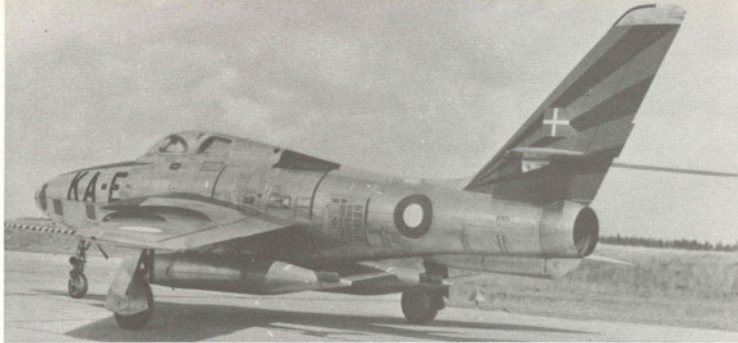
Above and right: RF-84F Thunderflashes of No. 717 Tactical Reconnaissance Squadron, Royal Norwegian Air Force. Natural metal finish, see colour illustration.



Below: No. 717 Squadron Thunderflash in latest colour scheme, PR blue upper surfaces, bare metal under surfaces, note code change from T3- to AZ- (S. P. Peltz)

Bottom: Detail shot of rear end of T3-N, No. 717 Squadron, R. Nor. A. F. Note unit insignia on fin. (S. P. Peltz)





Above: RF-84F Thunderflash of No. 729 Squadron, Royal Danish Air Force, based at Kastrup in early natural metal scheme; see colour illustration. (Jacob Stoppel)



Right: Camouflaged RF-84F of No. 729 Squadron, code C-649. (L. B. Hansen)



Left: C-385 dispersed amidst winter snows at Kastrup, standard camouflage finish; see colour illustration. (R. Dan. A. F.)

Below: C-649 rolling in to dispersal area at Kastrup, standard camouflage scheme, No. 729 Squadron, Royal Danish Air Force. (L. B. Hansen)





Above: A pair of Turkish Air Force F-84F's being serviced, bare metal finish with pale blue nose bands. Ex-Luftwaffe aircraft. Note serial positions, 28894 on fin, (2)8851 aft of national insignia. (G. H. Kamphuis)

Below: A camouflaged F-84F of the Turkish Air Force being refuelled. Note Luftwaffe type and serial number legend still visible beneath fin flash, standard Luftwaffe camouflage scheme. (G. H. Kamphuis)



Below: RF-84F Thunderflash of the Turkish Air Force, see colour illustration. (G. H. Kamphuis)

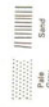




A3 Upper and under surfaces identical



A3 This plan view relates to further aircraft of formation of three in top photograph on page 16. Under surfaces identical.



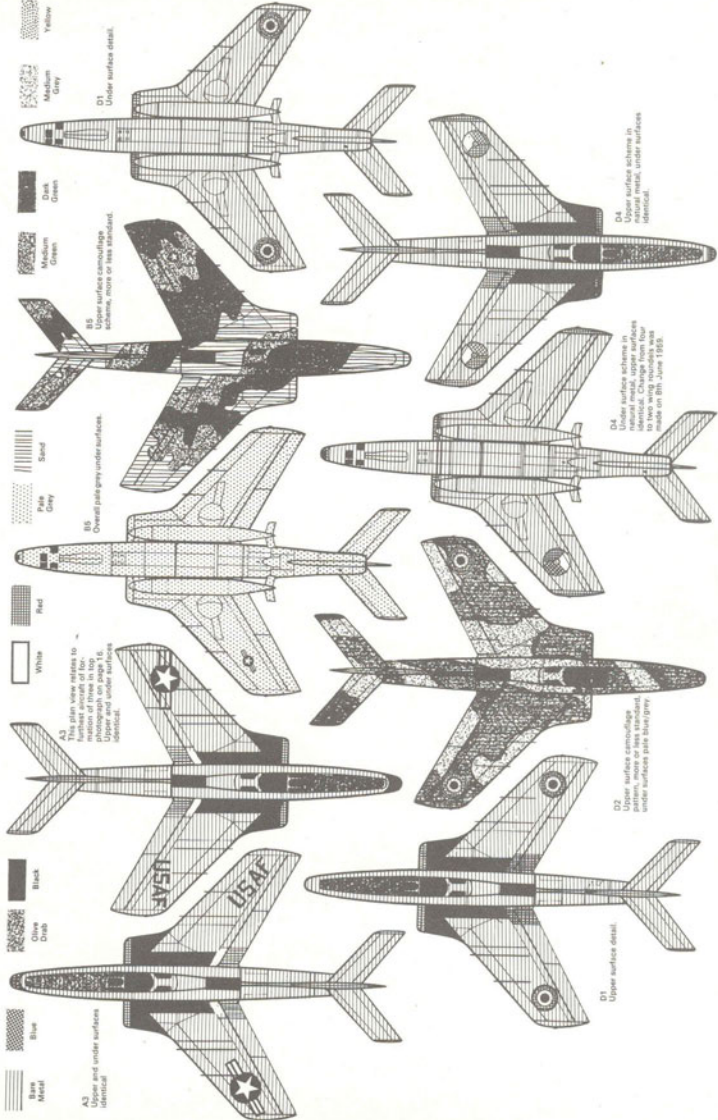
B5 Overall pale grey under surfaces.



B5 Upper surface camouflage scheme, more of this standard.



D1 Under surface detail.

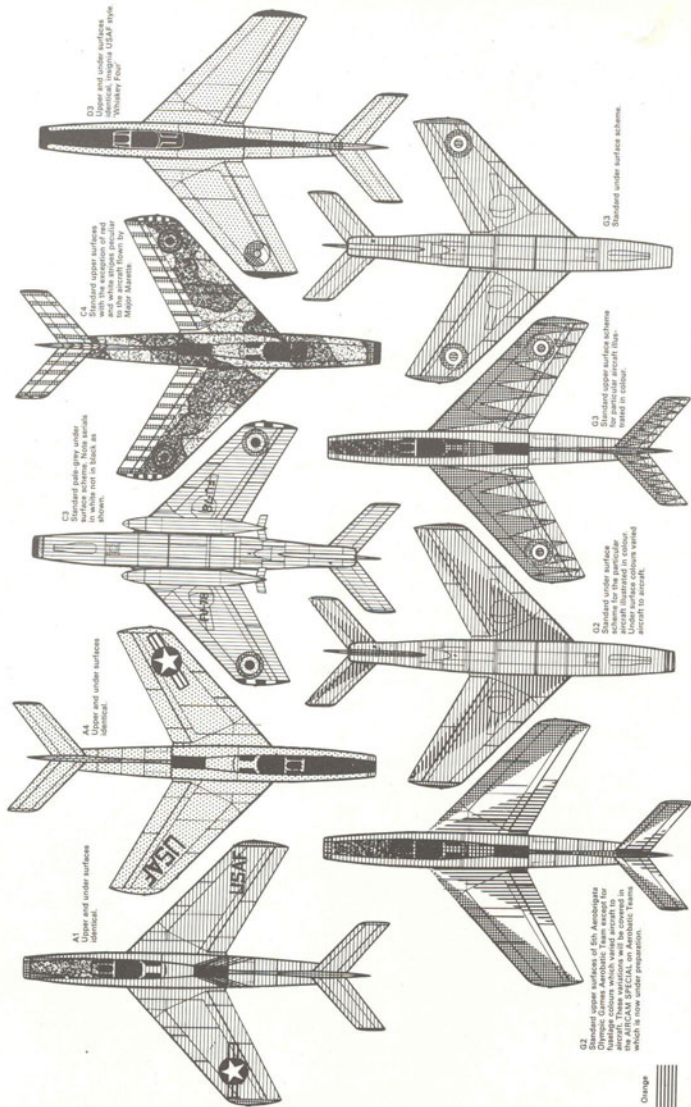


D1 Upper surface detail.

D2 Upper surface camouflage scheme, under surfaces pale blue grey.

D4 Under surface scheme in natural metal, upper surfaces identical. Change from four to six roundels was made on 31 June 1952.

D4 Upper surface scheme in natural metal, under surfaces identical.



A1
Upper and under surfaces
identical.

A2
Upper and under surfaces
identical.

C3
Standard pale-grey upper
surfaces. Lower surfaces
in white, red in black as
shown.

C4
Standard upper surfaces
with the exception of red
and white stripes peculiar
to the aircraft flown by
Major Mervin.

G3
Upper and under surfaces
identical. Markings USAF style
"Whisper Four".

G2
Standard upper surfaces of 1st Aerobatic
Olympic Games Aerobatic Team except for
the "AIRCAM SPECIAL" markings on the
aircraft. These variations will be carried in
the AIRCAM SPECIAL on Aerobatic Teams
which is now under preparation.

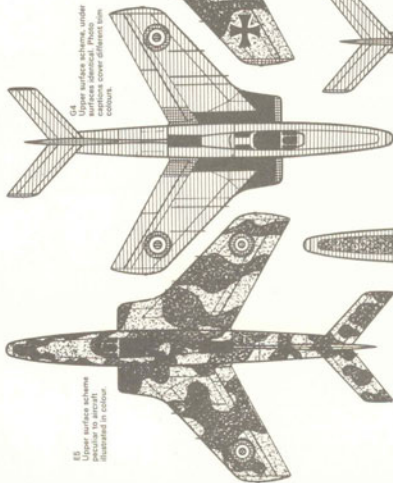
G2
Standard under surface
scheme for the particular
aircraft. Markings in colour.
Under surface colour varied
aircraft to aircraft.

G3
Standard upper surface scheme
for particular aircraft illus-
trated in colour.

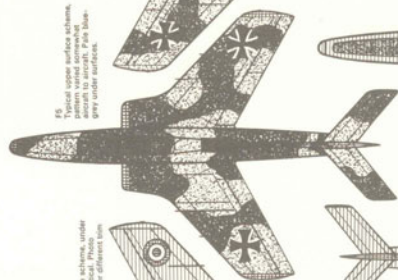
G3
Standard under surface scheme.



65 Upper surface scheme identical to aircraft illustrated in text.



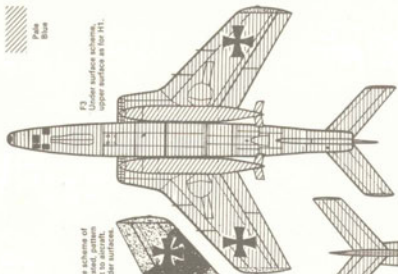
64 Upper surface scheme, under surfaces identical. Photo captions cover different trim colours.



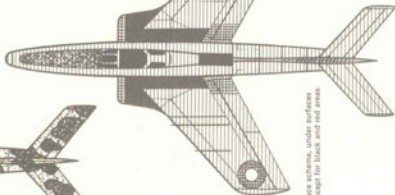
66 Typical upper surface scheme, pattern varied somewhat aircraft to aircraft. Pale blue-grey under surfaces.



67 Upper surface scheme of aircraft in text, pattern varied aircraft to aircraft. Pale grey under surfaces.



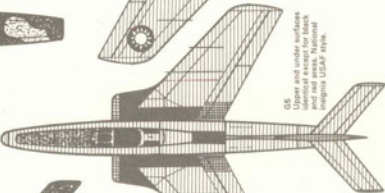
68 Under surface scheme, upper surface as for H1.



H1 Upper surface scheme, under surfaces identical except for black and red areas.



H4 Upper and under surfaces identical except for black and red areas.



G5 Upper and under surfaces identical except for black and red areas. No aircraft insignia USAF type.



H5 Upper and under surfaces identical except for black and red areas.

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**No. 3 North American Mustang Mk I-IV
North American P-51B and D Mustang**

**No. 4 Supermarine Spitfire Mk. I-XVI,
Merlin Engine**

No. 5 North American P-51B/C Mustang

No. 6 Curtiss (P-40) Kittyhawk Mk. I-IV

No. 7 Curtiss P-40 Warhawk

No. 8 Supermarine Spitfire—Griffon Engine

No. 9 Spad Scouts

No. 10 Lockheed P-38 Lightning

No. 11 Consolidated B-24 Liberator

No. 12 Avro Lancaster

No. 13 Nakajima Ki.43

**No. 14 Republic F/RF-84F
Thunderstreak / Thunderflash**

No. 15 Boeing B-17 Flying Fortress

No. 16 Mitsubishi A6m—Zero—Sen

No. 17 North American F-86A—H Sabre Vol. 1.

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The Supermarine Spitfire, Hawker Hurricane and Messerschmitt Bf109E. Sixteen pages of colour.

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SPECIFICATION		F-84F-25 Thunderstreak	RF-84F Thunderflash
Dimensions	Span	33-6 ft.	33-6 ft.
	Length	43-4 ft.	47-5 ft.
	Height	15 ft.	15 ft.
	Wing area	325 sq. ft.	347 sq. ft.
Powerplant	Type	J65-W-3/7	J65-W-7
	Thrust	7,220/7,800 lbs.	7,800 lbs.
Weights:	Empty	13,645 lbs.	14,014 lbs.
	Take-off	25,226 lbs.	25,390 lbs.
	Combat	18,700 lbs.	20,091 lbs.
Fuel Capacity	Normal	1,479 US Gals.	1,475 US Gals.
	Maximum	1,758 US Gals.	• • •
Speeds	Max. (sea level)	658 m.p.h.	629 m.p.h.
	Max. (35,000 ft.)	608 m.p.h.	582 m.p.h.
	Cruise	539 m.p.h.	542 m.p.h.
	Stall	151 m.p.h.	166 m.p.h.
Ceiling	Combat	42,250 ft.	36,900 ft.
	Service	36,150 ft.	39,390 ft.
Climb		7,000 ft.—1 min.	5,820 ft.—1 min.
		35,000 ft.—7-8 mins	30,000 ft.—15-8 mins
Combat Endurance		• • •	10-9 hrs at 40,000 ft with double re-fuel.
Combat radius		860 miles	710 miles Basic Mission 808 miles Design 579 miles Low Level Mission 2,304 miles Double re-fuel

Front cover, top to bottom

F-84F, 2/9 'Auvergne' Escadron, French Air Force, Metz 1961.

F-84F, Thunderbirds Aerobatic Team, United States Air Force.

F-84F, No. 10 Fighter-Bomber Wing, Belgian Air Force, Kleine-Broghele. 1961-63 scheme. Rudder and wing-tip colours, top to bottom, front to rear, white, blue, white, yellow, white, red, white.